

-174-

and 15 in the presence or absence of celecoxib in the diet. The efficacy of both agents were determined by measuring tumor volume. Treatment using a celecoxib reduced tumor volume by 68 %. In the same assay, 5-FU 5 decreased tumor volume by 61%. Further, the combination of celecoxib and 5-FU decreased tumor volume by 83%.

C. In a third assay, mice injected with HT-29 colon cancer cells were treated with 5-FU i.p 50 mg/kg on days 14 through 17 in the presence or absence of celecoxib 10 (1600ppm) and valdecoxib (160 ppm) in the diet. The efficacy of both agents were determined by measuring tumor volume. Treatment with 5-FU resulted in a 35% reduction in tumor voloume. Treatment with celecoxib and valdecoxib reduced tumor volume by 52 % and 69 %, 15 respectively. In the same assay, the combination of 5-FU and celecoxib decreased tumor volume by 72 % while the combination of 5-FU and valdecoxib decreased tumor volume by 74b % (Table 21).

20 Table No. 21. Tumor Volume Effect of Celecoxib and Valdecoxib alone and in combination with 5-Fluorouracil.

Days	Vehicle	5FU 50mpk	celeco- xib 160ppm	celeco- xib 160ppm /5FU 50mpk	valdec- oxib 160ppm	valdec- oxib 160ppm/ 5FU 50mpk
11	0.04	0.05	0.05	0.05	0.06	0.06
14	0.13	0.12	0.13	0.13	0.13	0.13
18	0.19	0.16	0.17	0.14	0.17	0.16
21	0.23	0.21	0.2	0.17	0.2	0.19

-175-

28	0.38	0.3	0.25	0.22	0.25	0.21
35	0.62	0.46	0.35	0.28	0.32	0.29
42	1.01	0.68	0.52	0.32	0.36	0.31

Volume (ml)

D. In a fourth assay, mice injected with HT-29 colon cancer cells were treated with celecoxib (10, 40 or 160 ppm) in the diet beginning at day 10. An 5 approximate dose dependent effect was observed. (Table No. 22).

Table No. 22. Celecoxib Inhibititis HT-29 Human Colon Carcinoma

Days	vehicle	10 ppm	40 ppm	160 ppm
14	0.114	0.124	0.125	0.120
22	0.25	0.25	0.19	0.14
28	0.45	0.36	0.27	0.21
35	0.79	0.57	0.4	0.3
42	1.38	0.89	0.68	0.49
50	1.9	1.49	1.04	0.8

10 Volume (ml)

-176-

What is claimed is:

1. A method for treating or preventing a neoplasia disorder in a mammal in need of such treatment or prevention, which method comprises administering to the mammal a therapeutically-effective amount of a combination of a cyclooxygenase-2 inhibitor and one or more antineoplastic agents, wherein said antineoplastic agents are selected from the group consisting of 5 anastrozole, calcium carbonate, capecitabine, carboplatin, cisplatin, Cell Pathways CP-461, docetaxel, doxorubicin, etoposide, fluoxymestrine, gemcitabine, goserelin, irinotecan, ketoconazole, 10 letrozol, leucovorin, levamisole, megestrol, mitoxantrone, paclitaxel, raloxifene, retinoic acid, tamoxifen, thiotepa, topotecan, toremifene, vinorelbine, vinblastine, vincristine, selenium (selenomethionine), sulindac sulfone, exemestane, 15 and eflornithine (DFMO).

2. The method of Claim 1 wherein the combination is administered in a sequential manner.

3. The method of Claim 1 wherein the combination is administered in a substantially simultaneous manner.

25 4. The method of Claim 1 wherein the antineoplastic agent is capecitabine.

5. The method of Claim 1 wherein the antineoplastic agent is carboplatin.

6. The method of Claim 1 wherein the 30 antineoplastic agent is cisplatin.